- forming a multi-layered film containing an antiferromagnetic layer, a pinned layer, a non-magnetic layer and a free layer continuously and collectively in a vacuum on a substrate;
- (2) applying a lift-off resist to form a track width on said continuous film;
- (3) removing a region not applied with said lift-off resist to said non-magnetic layer, to said pinned layer, to said anti-ferromagnetic layer, or to an intermediate layer of said anti-ferromagnetic layer by utilizing ion beams or the like with a good reproducibility;
- (4) forming an amorphous layer, an underlayer, a magnetic domain control layer and an electrode film layer

- at a region in which a portion of said multi-layered film is removed; and
- (5) removing said resist for lift-off.
- **22.** A method of manufacturing a magnetoresistive sensor according to claim 21, wherein

forming said amorphous metal film layer, a surface oxidation layer of said amorphous metal film layer, said underlayer, said magnetic domain control film and said electrode film are conducted continuously in one identical vacuum vessel.

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